come a slight constant current circulating through the galvanometer; and 2ndly, the fact obtained by Matteucci with the galvanoscopic frog would indicate that some force *is* evolved during muscular contraction.

Some differences appear to exist in the results obtained by the author and those of Du Bois-Reymond, viz. the *direction* of the current. Du Bois-Reymond considers it as *direct* in the frog, and *inverse* in man; the author's experiments indicate it to be *direct* in both cases, but he thinks that this difference will be found to be more in appearance than in reality, inasmuch as two distinct questions may have been involved, viz. 1st, whether the *muscular current* is affected during the act of contraction; and 2ndly, whether any force *is* or is *not* evolved during muscular contraction.

As the author wishes the paper to be considered as strictly experimental, and his object being to establish facts, he has endeavoured to avoid everything of a purely controversial character.

II. "On a simple Geometrical construction, giving a very approximate Quadrature of the Circle." By C. M. Willich, Esq. Communicated by Professor Stokes, Sec. R.S. Received April 17, 1855.

Let AB be a quadrant of a circle A, B, C. In the arc BC place a chord BD equal to the radius, so that the arc BD is one of 60°. Bisect BD in E; join AE, and produce the joining line to meet the circumference in F. Then AF differs from the side of a square equal in area to the circle by somewhat less than the one four-thousandth part of that side.

The Society then adjourned to the 24th of May.